Amendments to the Specification:

In the specification:

Please amend the paragraph beginning on page 6, line 16 as follows:

FIGS. 6A and 6B are a side ~~elevational~~ sectional view and a front ~~elevational~~ sectional view, respectively, of an exemplary cleaning/drying system configured in accordance with the present invention;

Please amend the paragraph beginning on page 6, line 22 as follows:

FIGS. 7A-7D are sequential side ~~elevational~~ sectional views of the exemplary cleaning/drying system of FIGS. 6A and 6B useful in describing the operation of the cleaning/drying system.

Please amend the paragraph beginning on page 16, line 13 as follows:

FIGS. 6A and 6B are a side ~~elevational~~ sectional view and a front ~~elevational~~ sectional view, respectively, of an exemplary cleaning/drying system 111 configured in accordance with the present invention. The cleaning/drying system 111 comprises a tank 113 of cleaning fluid. The tank 113 comprises two portions, a substrate receiving and cleaning portion 113a and a substrate rinsing portion 113b. A substrate shuttle 115 is coupled to carry a substrate S from the substrate receiving and cleaning portion 113a to the substrate rinsing portion 113b. The substrate shuttle 115 may be designed to support the substrate S vertically along the lateral sides thereof as shown in FIG. 6B.

Thus, a lifting mechanism 117 within the substrate rinsing portion 113b of the tank 113 can extend upward between a first and a second supporting sides 115a, 115b of the substrate shuttle 115, lifting the substrate S therebetween.

Please amend the paragraph beginning on page 19, line 7 as follows:

FIGS. 7A-D are sequential side ~~elevational~~ sectional views of the exemplary cleaning/drying system 111 of FIGS. 6A and 6B, which are useful in describing the operation of the inventive cleaning/drying system 111. As shown in FIG. 7A, the substrate shuttle 115 is initially in a retracted position within the substrate receiving and cleaning portion 113a of the tank 113, and a substrate S_1 is lowered into the substrate shuttle 115 via a wafer handler (not shown).

Please amend the paragraph beginning on page 19, line 15 as follows:

The substrate S_1 is megasonically cleaned within the substrate receiving and cleaning portion 113a via megasonic energy emitted from one or more transducers T positioned within the substrate receiving and cleaning portion 113a. To facilitate even cleaning across the entire surface of the substrate S_1, the substrate S_1 may be rotated via rollers (not shown). After the substrate S_1 is clean, the substrate shuttle 115 extends, carrying the substrate S_1 into the substrate rinsing portion 113b of the tank 113 as shown in FIG. 7B.

Please amend the paragraph beginning on page 19, line 25 as follows:

The lifting mechanism 117 elevates, contacting the lower edge of the substrate S_1 and slowly lifting the substrate S_1 from the fluid (FIG. 7C). The substrate S_1 preferably is lifted at a speed less than or equal to the vertical velocity component of rinsing fluid flowing out of the tip of the meniscus M.

Please amend the paragraph beginning on page 19, line 31 as follows:

As the substrate S_1 reaches the top of the tank fluid, the rinsing fluid nozzles 123 are engaged and begin to spray rinsing fluid such that the substrate S_1 is contacted with rinsing fluid immediately as it is lifted from the bath and thus does not dry (e.g., via evaporation) prior to reaching the drying vapor nozzles 125. The flow rate of the rinsing fluid spray is controlled to prevent rinsing fluid from splashing into or above the drying vapor spray. As stated, to affect precise positioning of the rinsing fluid, one or more of the inventive spray bar assemblies 31a-31d of FIGS. 2-3C may be employed to deliver the rinsing fluid to the substrate S_1.

Please amend the paragraph beginning on page 20, line 10 as follows:

As soon as the substrate S_1 intersects the rinsing fluid spray) from the rinsing fluid nozzles 123, the drying vapor nozzles 125 are engaged and direct a drying vapor flow to the rinsing fluid meniscus M which forms on the surface of the substrate S. As stated, to affect precise positioning of the drying vapors, one or more of the inventive spray bar assemblies 31a-31d of FIGS. 2-3c may be employed to deliver drying vapors to the substrate S_1. The drying vapors are absorbed by the rinsing fluid, which lowers the surface tension of the rinsing fluid and

induces a Marangoni flow from the meniscus toward the bulk of the rinsing fluid. The Marangoni flow thereby dries the substrate's surface leaving the surface free of streaks, spotting and/or cleaning fluid residue.

Please amend the paragraph beginning on page 20, line 24 as follows:

As the lifting mechanism 117 lifts the substrate S_1 into the drying enclosure 119, the first and second supporting sides 115a, 115b of the substrate shuttle 115 followed by the first pair of rails 116a, 116b provide stabilizing contact along the edges of the substrate S_1. After the substrate S_1 disengages supporting sides 115a, 115b of the shuttle 115, the shuttle is returned to the receiving and cleaning portion 113a of the tank 113 and is ready to receive and clean the next substrate. The first pair of rails 116a, 116b support the substrate S_1 below the air/substrate/rinsing fluid interface 127 (FIG. 7C). The dry part of the substrate S_1 is guided and supported by the second pair of rails 118a, 118b as the substrate S_1 enters the drying enclosure 119. The gap between the first pair of rails 116a, 116b and the second pair of rails 118a, 118b is sufficient to accommodate the rinsing fluid nozzles 123 and the drying vapor nozzles 125, such that the substrate is dry when it encounters the second pair of rails 118a, 118b (e.g., 5-10mm). The lifting mechanism 117 continues to lift the substrate S_1 until the bottom portion thereof has passed through the drying meniscus M (FIG. 7C). When the substrate S_1 is 3-5mm above the positioning pins 122a, 122b, controller 131 releases the positioning pins 122a, 122b. The lifting mechanism 117 retracts, the substrate S lowers therewith until the substrate is supported by the positioning pins 122a, 122b (only 122a shown), the rinsing fluid spray stops and residual rinsing fluid is driven off the substrate S_1's

surface by the combined surface tension gradient and by a pulse of hot nitrogen which is applied to the bottom 3mm of the substrate via a nozzle (not shown) for 1-2 seconds. Afterwards, the substrate S_1 is unloaded from the drying enclosure 119 via the sealable port 121. The positioning pins 122a, 122b fix the Z-axis coordinate of the substrate S_1 at a known position such that an unloading robot (not shown) may repeatably extract the substrate S.

Please amend the paragraph beginning on page 21, line 32 as follows:

As shown in FIG. 7D, during the time in which the substrate S_1 is lifted into the first pair of rails 116a, 116b, the substrate shuttle 115 retracts into the substrate receiving and cleaning portion 113a and a second substrate S_2 is loaded into the substrate shuttle 115 via a wafer handler (not shown). Thereafter, the second substrate S_2 is megasonically cleaned while the first substrate S_1 is being rinsed and dried until the lifting mechanism 117 retracts. If cleaning and rinsing in the receiving and cleaning portion 113a is complete, substrate S_2 is ready to be shuttled to the substrate rinsing portion 113b, while the first substrate S_1 is unloaded from the drying enclosure 119 via the sealable port 121. In this manner the throughput of the inventive cleaning/drying system 111 is increased, as the load and unload time required of conventional tank systems overlaps with the time required for processing (cleaning, rinsing and drying). In at least one embodiment of the invention, the rinsing fluid is not employed and drying vapors are directed (e.g., via one or more of the inventive spray bar assemblies 31a-31d of FIGS. 2-3C) toward an air/substrate/cleaning fluid interface formed when a substrate is lifted from the cleaning fluid (e.g., via the lifting mechanism 117).